Author Index-Volume 35, 1997

Current Microbiology

An International Journal
© Springer-Verlag New York Inc.

Pal, Soma, 327

Ahearn, D.G., 305 Ahring, Birgitte K., 116 Ahuja, Prerna, 151 Aldrich, H.C., 169 Alice, Alejandro F., 309 Alvárez, María, 186 Aminov, Rustem I., 22 Asano, Shinichiro, 1

Bagramyan, Karine, 201

Bahl, Hubert, 237 Bando, Hisanori, 1 Baumann, Linda, 18, 122 Baumann, Paul, 18, 68, 84, 122 Bégin, Caroline, 139 Belguendouz, Talal, 233 Benno, Yoshimi, 22 Bhandari, Manju, 207 Binz, Thomas, 278 Blotevogel, Karl-Heinz, 343 Boopathy, Ramaraj, 64 Bouquelet, Stéphane, 175 Bové, Joseph M., 240 Branlant, Christiane, 319 Brassart, Colette, 175 Brigmon, R.L., 169 Brooker, John D., 133 Brule, Fabienne, 319 Burlingame, Richard, 356 Burriel, Angeliki Rothi, 316

Cachon, Rémy, 233 Callaway, Todd R., 90 Campbell, Kathryn D., 207 Canevascini, Giorgio, 278 Cannons, Andrew C., 356 Carle, Patricia, 287 Carneiro De Melo, Alexandra MS 90 Champion, Rebecca A., 363 Chen, Huakui, 215 Chen, Shiu-Nan, 32 Chiang, An-Na, 28 Chung, Jing G., 195 Chung, Jing-Gung, 262 Clark, Marta A., 18, 84, 122 Collins, Matthew D., 207 Conway de Macario, Everly, 116 Crow, Sidney A., Jr., 165, 305 Cummings, John H., 294

Darzins, Al., 9 Dawson, Hana N., 356 Dawson, Karl A., 221 de Giori, Graciela S., 161 Delaney, Stephen F., 71 Desai, Anjana J., 191 Diviès, Charles, 233 Drzyzga, Oliver, 343 Dubreuil, J. Daniel, 139 Dunn, Noel W., 59

East, Alison K., 207 Effmert, U., 348 England, Dacre F., 71 Erdmann, N., 348

Fett, William F., 124 Fields, Matthew W., 274 Fishbain, Susan, 244 Foissac, Xavier, 240 Fonty, Gerard, 44 Fraley, Cress, 336 French, Frank E., 287 Fulda, S., 348 Fuller, Mark E., 77

Gallus, Corinna, 270 Gardner, Richard G., 274 Gasparich, Gail E., 287 Gavini, Françoise, 175 Gibson, Glenn R., 294 Girbal, Laurence, 155 Gottschal, Jan C., 155 Gouet, Philippe, 44 Gunge, Norio, 129 Gupta, Rani, 151

Hackett, Kevin J., 287 Hashimoto, Naoki, 1 Hastings, John W., 331 Hastowo, Sugyo, 1 Hébert, Elvira M., 161 Henegar, Roberta, 287 Herbin, Sabine, 319 Hsieh, Sue E., 195 Hunt, Patrick G., 363

lizuka, Toshihiko, 1 Irani, Vida R., 9 Ishii, Takaaki, 40

Jacques, Mario, 139

K.G., Hanson, 191 Kalyuzhnaya, Marina G., 257 Kao, Hsun-Sheng, 28 Kapadia, Madhavi, 191 Katsuhara, M., 97 Khetmalas, M.B., 145 Khmelenina, Valentina N., 257 Kim, Woojin S., 59 Komatani, Kenji, 48 Krier, Francois, 331 Krzewinski, Frédéric, 175 Kudo, Hiroshi, 22 Kurtz, Alexandra Massey, 165

Lange, Marianne, 116
Lay, Bibiana W., 1
Le Caer, Jean Pierre, 331
Lebrihi, Ahmed, 319
Lee, Kuo-Kau, 32, 109
Lefebvre, Gérard, 319, 331
Li, Fudi, 215
Liu, Ping-Chung, 32
Lo, Hsueh H., 195
Lou, Jianrong, 221

Macario, Alberto J.L., 116 Manna, Anupam, 327 Manners, John M., 228 Manning, John F., Jr., 77 Martin, H.W., 169 Martín-Díez, Francisco, 186 Martínez-Suárez, Joaquín V., 186 Mathieu, Florence, 319 Mathis, James N., 363 Matin, Abdul, 336 Mattingly, Stephen J., 103 Matuschek, Markus, 237 McCarthy, Jane M., 133 McFadden, Bruce A., 14, 267 McMillin, David E., 363 Meighen, Edward, 336 Meinhardt, Friedhelm, 129 Minato, Hajime, 22 Mishra, S.K., 305 Mitsumori, Makoto, 22 Moran, Nancy A., 18 Moreau, Robert A., 124 Moreno, Rita, 249 Morgavi, Diego P., 48

Nagamine, Takafumi, 22 Nakao, H., 97 Nautiyal, Chandra Shekhar, 52 Neale, Graham, 294 Nigam, Anuranjini, 191

Mosoni, Pascale, 44

Ogata, Koretsugu, 22 Ohba, Michio, 40 Oheim, S., 348 Onodera, Ryoji, 48 Örlygsson, Jóhann, 155 Ostermann, Angela, 270 Papathanasopoulos, Maria A., 331 Paul, Amal K., 327 Pemberton, John M., 228 Penfold, Robert J., 71 Pierson, D.L., 305 Piña, Sophia E., 103 Poladian, Anna, 201

Powell, Michael J., 124

Price, D.L., 305

Ramsay, Mary A., 249
Raya, Raúl, 161
Rehman, Abdur, 14, 267
Reinders, Bert J., 155
Revol-Junelles, Anne-Marie, 331
Rioux, Stéphane, 139
Robinson, Jayne B., 244
Rodríguez-Tudela, Juan L., 186
Rogers, Peter L., 71
Rouhbakhsh, Dadbeh, 18
Rowe, John J., 9
Ruiz-Díez, Beatriz, 186
Russell, James B., 90, 274, 299

Sahm, Kerstin, 237 Saillard, Colette, 240 Sakellaris, Harry, 228 Sakurada, Masaru, 48 Sanchez-Rivas, Carmen, 309 Sanford, Barbara A., 249 Sasaki, Jun, 1 Sato, M., 97 Saxena, R.K., 151 Schink, Bernhard, 270 Schründer, Jürgen, 129 Sekizaki, Tsutomu, 22 Shaw, Gwo-Chyuan, 28 Simmons, R.B., 305 Solaiman, Daniel K.Y., 180 Somkuti, George A., 180 Stahl, David A., 244 Starostina, Natalia G., 257 Strobel, Herbert J., 221 Sugiura, Mutsumi, 22 Sung, Chi-Chang, 28 Suzina, Natalia E., 257

Tajima, Kiyoshi, 22 Thao, MyLo Ly, 68 Thomas, Virginia L., 249 Tomita, Yoshifumi, 48 Trchounian, Armen, 201 Trotsenko, Yuri A., 257 Tu, Chi-Ching, 32 Tuhela, Laura, 244 Tully, Joseph G., 287 Tuovinen, Olli H., 244

Ulitzur, Shimon, 336

Voegtlin, David J., 18 von Holy, Alexander, 331

Wang, Hwang-Huei, 262 Watanabe, K., 97 Wells, James E., 274, 299 Whitaker, Bruce D., 124 Whitcomb, Robert F., 287 Whitehead, Terence R., 282 Williamson, David L., 287 Willis, Caroline L., 294 Wilson, David B., 274 Yang, Tun-I, 109 Yen, Yee S., 195 Yii, Kah-Ching, 109

Zou, Xianghong, 215

Current Microbiology

An International Journal
© Springer-Verlag New York Inc.

- Acetate-utilizing methanogenic bacteria, in swine manure, phenol degradation by, 64
- Acinetobacter sp. A3, bioremediation of crude oil contamination with, 191
- Aconitate isomerase, detection and molecular analysis of plant- and insect-associated bacteria containing, 97
- Actinobacillus pleuropneumoniae serotype I, isolation and characterization of LPS mutants of, 139
- Agrobacterium tumefaciens, transposon-induced catalase-deficient mutants of, 145
- Air filters, fungal colonization of and production of volatile organics by, 305
- Alginate synthesis, in P. aeruginosa, role of fluoroquinolones in, 103
- α-amylase gene, intracellular, gene knockout of by homologous recombination in Streptococcus bovis, 133
- Amino acid degradation, by Clostridium acetireducens, 155
- Antibiotic resistance, in P. aeruginosa, role of fluoroquinolones in, 103
- Arylamine N-acetyltransferase activity, inhibited by ibuprofen in Klebsiella pneumoniae, 195
- ATP-binding cassette (ABC) transport system, genes in Thermoanaerobacterium thermosulfurigenes EM1 encoding, 237
- ATP synthase, genetic analysis of DNA fragment containing gene for, 84
- Azotobacter chroococcum MAL-201, induction of encystment and poly-β-hydroxybutyric acid production by, 327

Bacillus megaterium

- Bacillus sphaericus mosquitocidal toxin in,
- iron and salicylate induction of cytochrome P450_{BM-1} in, 28
- Bacillus megaterium mutants, high levels of heterologous protein produced by, 71
- Bacillus subtilis 168, DNA supercoiling and osmoresistance in, 309
- Bacillus thuringiensis serovar canadensis, mosquito-specific larvicidal activity of inclusion proteins of, 40
- Bacillus thuringiensis serovar sotto, cry2A gene cloned from, 1

Bacteriocin activity

- by Leuconostoc mesenteroides TA33a, 331 produced by Carnobacterium piscicola CP5, characteristics and genetic determinants of, 319
- Bacteroides, bifunctional xylosidase/arabinosidase gene as reporter gene for, 282
- Bifidobacterium bifidum DSM 20082, glucose and galactose transport in, 175

- Biofilm, produced by S. epidermidis, ELLA measured matrix of, 249
- Biofouling, of groundwater systems by Thiothrix spp., 169
- Botulinum neurotoxin complex, in Clostridium botulinum types B and G, molecular characterization of gene clusters encoding, 207
- Bradyrhizobium japonicum 110 culture, difference in ability to impart drought tolerance to sovbean, 363
- Buchnera, of Uroleucon sonchi contain plasmids with trpEG and trpE pseudogene remnants, 18

Buchnera aphidicola

- cloning and sequencing of DNA fragment containing gene encoding (F₁F₀) ATP synthase of, 84
- nucleotide sequence of DNA fragment from, 68
- nuoC(D) genes encoding subunits of
- NADH dehydrogenase contained in, 122 Building insulation, fungal colonization of and production of volatile organics by, 305
- Candida maltosa, transformation of chlororesorcinol by, 165
- Candida tropicalis, transformation of chlororesorcinol by, 165
- Carnobacterium piscicola CP5, characteristics and genetic determinants of bacteriocin activities produced by, 319
- Cellobiose, hydrolytic and phosphorolytic cleavage of in Ruminococcus albus, 221
- Cellodextrin, hydrolytic and phosphorolytic cleavage of in Ruminococcus albus, 221
- Cellulose, competition between ruminal cellulolytic bacteria by adhesion to, 44
- Cellvibrio mixtus, role of lam2 gene of in βglucan degradation in soil, 228
- Chickpea-rhizosphere-competent bacteria, for suppression of chickpea pathogenic fungi,
- Chitinase, of Piromyces communis OTS1, purification and characterization of, 48
- Chlorella sorokiniana, nitrate reductase-deficient, rescued by NR gene from Chlorella vulgaris, 356
- Chlorella vulgaris, nitrate reductase-deficient Chlorella mutants rescued with NR gene from, 356
- Chlororesorcinol, transformed by hydrocarbonoclastic yeasts, 165
- Cholesterol oxidase (choA) gene, role of ST_{P2201} in expression of in lactic acid bacteria, 180
- Citric acid, effect on intracellular pH of Leuconostoc mesenteroides and Lactococcus lactis, 233

- Clostridium acetireducens, depends on acetate for growth on leucine and alanine, 155
- Clostridium botulinum types B and G, molecular characterization of gene clusters encoding botulinum neurotoxin complex in, 207
- Cold shock gene, identified in lactic acid bacteria, 59
- Copper biosorption, by Oscillatoria anguistissima, 151
- Crude oil biodegradation, role of Acinetobacter sp. A3 in, 191
- Cry2A gene, cloned from Bacillus thuringiensis serovar sotto isolate. 1
- Cryotolerance, cold-shock-induced, in lactic acid bacteria, 59
- Cyst formation, by Azotobacter chroococcum MAL-201, effect of cultural conditions on, 327
- Cysteine 195, role in catalysis by isocitrate lyase from E. coli, 267
- Cysteine protease, produced by Vibrio harveyi, purification and characterization of, 32
- Cytochrome P450_{BM-1}, in Bacillus megaterium, iron and salicylate induction of, 28
- 2-Deoxyglucose, lysis of Streptococcus bovis JB1 promoted by, 299
- Desulfovibrio desulfuricans, in human large intestine, nutritional requirements of, 294
- Differential radiolabeling (14C/9H), competition between ruminal cellulolytic bacteria for adhesion to cellulose studied by, 44
- 2.3-Dihydroxybenzoate, decarboxylation of to catechol supports growth of fermenting bacteria, 270
- Diphenylamine, microbial degradation of, under anoxic conditions, 343
- DNA supercoiling, in Bacillus subtilis 168, 309
- Emodin, inhibits growth and induces DNA damage in Helicobacter pylori, 262
- Enzyme-linked immunosorbent assay (ELISA), identification and characterization of *Thio*thrix spp. in biofilms by, 169
- Enzyme-linked lectinsorbent assay (ELLA), N-acetyl-D-glucosamine in biofilm matrix produced by Staphylococcus epidermidis measured by, 249
- Epinephelus coioides, isolation and characterization of Vibrio carchariae as causative agent of gastroenteritis in, 109

Escherichia coli

- bifunctional xylosidase/arabinosidase gene as reporter gene for, 282
- effect of H-NS protein on lux systems of Vibrio fischeri cloned in, 336

- function of lysine 194 in isocitrate lyase from, 14
- H⁺-K⁺ exchange through F₀F₁ ATPase and TrkA system in, 201
- role cysteine 195 in catalysis by isocitrate lyase from, 267
- Ethanol, effect on levels of hopanoids and lipids in Zymomonas mobilis, 124
- Exo-β-glucosidase, encoded by lam2 gene from Cellvibrio mixtus, 228
- F₀F₁-ATPase, role in H⁺-K⁺ exchange in E. coli. 201
- Fermenting bacteria, decarboxylation of 2,3dihydroxybenzoate to catechol supports growth of, 270
- Fibrobacter succinogenes, genomic map of,
- Fibrobacter succinogenes \$85, adhesion to cellulose of, 44
- Fluoroquinolones, role in alginate synthesis and antibiotic resistance in P. aeruginosa, 103
- Formate hydrogenlyase, role in H⁺-K⁺ exchange through F₀F₁ ATPase and TrkA system in E. coli, 201
- Fungal colonization, of air distribution systems, production of volatile organics by, 305
- Fusarium oxysporum f. sp. ciceri, rhizospherecompetent biocontrol bacterium antagonistic to, 52
- Galactose transport, in Bifidobacterium bifidum DSM 20082, 175
- Gene knockout, of intracellular amylase gene by recombination in Streptococcus bovis, 133
- Genetic map, of DNA fragment from Buchnera aphidicola, 68
- Genomic map, of Fibrobacter succinogenes, 22
- Glucose transport, in Bifidobacterium bifidum DSM 20082, 175
- Gram-negative bacteria, sensitivity to and transformation of TNT by, 77
- Gram-positive bacteria, sensitivity to and transformation of TNT by, 77
- Gravity changes, effect on Synechocystis sp. PCC 6803, 348
- Halotolerant alkaliphilic methanotrophic bacteria, isolation and characterization of, 257
- Heat shock, response of dnaK locus of Methanosarcina mazei S-6 to, 116
- Helicobacter pylori, emodin-induced inhibition of growth and DNA damage in, 262
- Hopanoids, effect of ethanol and oxygen on levels of, in Zymomonas mobilis, 124
- Hydrocarbonoclastic yeasts, chlororesorcinol transformed by, 165
- Hyphomicrobium isolate, phylogenetic and narG analysis of, 244

- Ibuprofen, arylamine N-acetyltransferase activity in Klebsiella pneumoniae inhibited by, 195
- Indirect immunofluorescence (IFF), identification and characterization of Thiothrix spp. in biofilms by, 169
- Iron, P450_{BM-1} in Bacillus megaterium induced by, 28
- Isocitrate lyase, from E. coli, function of lysine 194 in, 14
- Klebsiella pneumoniae, ibuprofen inhibits arylamine N-acetyltransferase activity in, 195
- Laccase, from Ophiostoma novo-ulmi, purification and characterization of, 278
- Lactic acid bacteria, effect of cold shock on cryotolerance of, 59
- Lactobacillus helveticus, effect of cold shock on cryotolerance in, 59
- Lactobacillus helveticus CRL 581, characterization of cell membrane-associated proteinase from, 161
- Lactococcus lactis, pH homeostatis and citric acid use in, 233
- Large intestine, nutritional aspects of dissimilatory sulfate reduction in, 294
- Leucine, Clostridium acetireducens unable to use interspecies hydrogen transfer for growth on, 155
- Leuconostoc mesenteroides, pH homeostatis and citric acid use in, 233
- Leuconostoc mesenteroides TA33a, multiple bacteriocin production by, 331
- Leuconostoc/Weissella strains, multiple bacteriocin production by, 331
- Lipopolysaccharide mutants, of Actinobacillus pleuropneumoniae serotype 1, isolation and characterization of, 139
- lux systems, of Vibrio fischeri cloned into E. coli, H-NS protein represses transcription of, 336
- Lysine 194, in isocitrate lyase from E. coli, 14
- Methanobacterium formicicum, in coculture with C. acetireducens, degradation of α ketoisocaproate but not leucine by, 155
- Methanosarcina mazei S-6, heat shock response of dnaK (hsp70) locus in, 116
- Methanosarcina thermophila TM-1, presence of dnaK gene in, 116
- Methylobacter alcaliphilus sp. nov., isolation and characterization of, 257
- Monensin, effect on ruminal fermentation, 90 Mosquitocidal protein, of Bacillus thuringiensis serovar canadensis, characterization of,
- NADH dehydrogenase, cloning of nuoC(D) gene in Buchnera aphidicola encoding, 122
- narG gene, genomic DNA of Hyphomicrobium isolate probed by, 244
- Nisin, effect of ruminal fermentation, 90

- Nitrate reductase gene, stable transformation of NR-deficient Chlorella mutant with, 356
- Nitrate reduction systems, of Pseudomonas aeruginosa PAO1, snr loci common to, 9
- nuoC(D) genes, encoding subunits of NADH dehydrogenase contained in Buchnera aphidicola, 122
- Ophiostoma novo-ulmi, purification and characterization of extracellular laccase from, 278
- Oscillatoria anguistissima, Cu²⁺ adsorption by, 151
- Osmoresistance, in Bacillus subtilis 168, 309
- Pasteurella haemolytica, isolated from grass, drinking water, and straw bedding used by sheep, 316
- PCR fingerprinting, for genotyping Scedosporium prolificans (inflatum) outbreak in leukemic patients, 186
- Pediococcus pentosaceus, effect of cold shock on cryotolerance in, 59
- pH, extracellular, effect on intracellular pH of Leuconostoc mesenteroides and Lactococcus lactis, 233
- Phenol, degraded by bacterial consortium in swine manure, 64
- Piromyces communis OTS1, purification and characterization of chitinase of, 48
- Plasmids, in Rhizobium huakuii, characterization of, 215
- Poly-β-hydroxybutyric acid production, by Azotobacter chroococcum MAL-201, effect of cultural conditions on, 327
- Polysaccharide hydrolases, encoded by Prevotella ruminicola B₁4 operon, 274
- Porphyromonas, bifunctional xylosidase/arabinosidase gene as reporter gene for, 282
- Prevotella ruminicola B₁4 operon, extracellular polysaccharide hydrolases encoded by, 274
- Promoter sequence ST_{P2201}, of Streptococcus thermophilus, 180
- Proteinase activity, of Lactobacillus helveticus CRL 581, 161
- Proton-potassium exchange, in E. coli, role of formate hydrogenlyase in, 201
- Pseudomonas aeruginosa, role of fluoroquinolones in alginate synthesis and antibiotic resistance in, 103
- Pseudomonas aeruginosa PAO1, cloning and mapping of snr loci of nitrate reduction systems of, 9
- Pseudomonas fluorescens LRB3W1, aconitate isomerase biosynthesis genes detected in, 97
- Pseudomonas fluorescens NBR11303, biocontrol of chickpea pathogenic fungi by, 52
- Pulsed-field gel electrophoresis, genetic diversity of Fibrobacter succinogenes isolates shown by, 22
- Pythium sp., rhizosphere-competent biocontrol bacterium antagonistic to, 52

Random amplification of polymorphic DNA (RAPD), for genotyping Scedosporium prolificans (inflatum) outbreak in leukemic patients, 186

Reporter gene, for Bacteroides and Porphyromonas, 282

Restriction fragment length polymorphism, genetic diversity of Fibrobacter succinogenes isolates shown by, 22

Rhizobium huakuii, characteristics of plasmids of, 215

Rhizoctonia bataticola, rhizosphere-competent biocontrol bacterium antagonistic to, 52

Ruminal fermentation, effect of nisin and monensin on, 90

Ruminococcus albus, cellobiose and cellodextrin metabolism by, 221

Ruminococcus albus 20, adhesion to cellulose of, 44

Ruminococcus flavefaciens FD1, adhesion to cellulose of, 44

Salicylate, P450_{BM-1} in Bacillus megaterium induced by, 28

Scedosporium prolificans (inflatum), typed by RAPD and PCR fingerprinting, 186

Shared nitrate reduction (snr) loci, common to nitrate reduction systems of Pseudomonas aeruginosa PAO1, 9

Spiralin genes, of spiroplasmas, sequence analysis of, 240

Spiroplasma kunkelii, sequence analysis of spiralin genes in, 240 Spiroplasma phoeniceum, sequence analysis of spiralin genes in, 240

Spiroplasmas, from North American tabanidae, groups and subgroups of, 287

Staphylococcus epidermidis, ELLA measures N-acetyl-D-glucosamine in biofilm matrix produced by, 249

Streptococcus bovis, gene knockout of intracellular amylase gene by homologous recombination in, 133

Streptococcus bovis JB1, 2-deoxyglucose promotes lysis of, 299

Streptococcus thermophilus effect of cold shock on cryotolerance in, 59 properties of ST_{P2201} chromosomal promoter sequence of, 180

Sulfate-reducing bacteria

in human large intestine, nutritional requirements of, 294

in swine manure, phenol degradation by, 64 Swine manure, anaerobic phenol degradation by bacterial consortium in, 64

Synechocystis sp. PCC 6803, effect of gravity changes on, 348

Tabanidae, spiroplasma species, groups, and subgroups from, 287

Thermoanaerobacterium thermosulfurigenes EM1, molecular characterization of genes encoding ABC transporter in, 237

Thiothrix spp., biofouling of groundwater systems by, 169

Trans-aconitic acid, detection in P. fluorescens of aconitate isomerase involved in biosynthesis of, 97 Trichosporon oivide, transformation of chlororesorcinol by, 165

2,4,6-Trinitrotoluene (TNT), aerobic grampositive and gram-negative bacteria transformation of and sensitivity to, 77

TrkA system, role in H⁺-K⁺ exchange in E. coli, 201

trpEG, in plasmids in Buchnera of Uroleucon sonchi, 18

Uroleucon sonchi, trpEG-containing plasmids in Buchnera of, 18

Vibrio carchariae, isolated and characterized as causative agent of gastroenteritis in Epinephelus coioides, 109

Vibrio fischeri, cloned into E. coli, H–NS protein represses transcription of lux systems of 336

Vibrio harveyi, purification and characterization of cysteine protease produced by, 32 Volatile organics (VOC), produced by fungal

Volatile organics (VOC), produced by fungal colonization of air distribution systems, 305

Weissella strains, bacteriocin production by, 331

Xylosidase/arabinosidase gene, as reporter gene for gram-negative anaerobes and E. coli, 282

Zymomonas mobilis, effect of ethanol and oxygen on levels of hopanoids and lipids in, 124